

## ABSTRACT OF THE DISCLOSURE

A radio-frequency receiver mixes a received radio-frequency signal with a local signal in a mixer to convert the radio-frequency signal into an intermediate-frequency signal or baseband signal. In this radio-frequency receiver, a frequency multiplier circuit multiplies the frequency of the output signal of a VCO and feeds the resulting signal as the local signal to the mixer. The output level of the frequency multiplier circuit is switched by a level switcher circuit, which is controlled by a tuning controller according to the received frequency. The controller also controls a PLL circuit for tuning.